AMENDMENTS TO THE CLAIMS

This listing of the claims replaces all prior versions, and listings of the claims in the application:

Claims 1-42. (Cancelled)

43. (Previously Presented) A system for treating a breathing disorder comprising:

electromuscular stimulating means for providing electrical energy to a sublingual location of a patient; and

mandibular positing means for controlling a position of such a patient's mandible relative to an upper dentition of such a patient.

44. (Previously Presented) The system of claim 43, wherein the electromuscular stimulating means includes positioning means for locating a first electrode and a second electrode in sublingual positions within a patient's oral cavity such the second electrode is located in a position posterior to the first electrode to deliver the electrical energy in an anterior-to-posterior direction or a posterior-to-anterior direction.

45. (Previously Presented) The system of claim 43, wherein the electromuscular stimulating means includes positioning means for locating a first electrode and a second electrode on a same side of a patient's oral cavity.

46. (Previously Presented) The system of claim 43, wherein the electromuscular stimulating means includes positioning means for locating a first electrode and a second electrode posterior to the frenulum.

47. (Previously Presented) The system of claim 43, wherein the mandibular positing means comprises:

a first member adapted to engage a structure associated with a patient's upper dentition;

a second member adapted to engage a structure associated with such a patient's mandible; and

means for limiting movement of the first member relative to the second member, thereby controlling a position of such a patient's mandible relative to the upper dentition.

48. (Previously Presented) The system of claim 43, further comprising means for providing a positive pressure to an airway of such a patient.

49. (Previously Presented) The system of claim 43, wherein the electromuscular stimulating means includes:

respiration detecting means for detecting an inspiratory phase and an expiratory phase of a patient; and

means for controlling a delivery of electrical energy such that electrical stimulation occurs at a stimulation start time prior to onset of the inspiratory phase and continues through at least a portion of the inspiratory phase.

50. (Previously Presented) A method of treating a breathing disorder comprising:

providing electrical energy to a sublingual location of a patient; and

controlling a position of such a patient's mandible relative to an upper dentition of such a patient.

51. (Previously Presented) The method of claim 50, wherein providing electrical energy includes:

positioning a first electrode and a second electrode in sublingual positions within such a patient's oral cavity such that the second electrode is located in a position posterior relative to the first electrode; and

applying an electrical stimulation via the first electrode and the second electrode so as to deliver electrical energy to a patient in an anterior-to-posterior direction or a posterior-to-anterior direction.

52. (Previously Presented) The method of claim 50, wherein providing electrical energy includes locating a first electrode and a second electrode on a same side of a patient's oral cavity.

53. (Previously Presented) The method of claim 50, wherein providing electrical energy includes locating a first electrode and a second electrode posterior to the frenulum.

54. (Previously Presented) The method of claim 50, wherein controlling a position of such a patient's mandible comprises:

engaging a first member with a structure associated with a patient's upper dentition;

engaging a second member with a structure associated with such a patient's mandible; and

limiting movement of the first member relative to the second member, thereby controlling a position of such a patient's mandible relative to the upper dentition.

55. (Previously Presented) The method of claim 50, further comprising providing a positive pressure to an airway of such a patient.

56. (Previously Presented) The method of claim 50, wherein providing electrical energy includes:

detecting an inspiratory phase and an expiratory phase of a patient; and

controlling delivery of electrical energy such that electrical stimulation occurs at a stimulation start time prior to onset of the inspiratory phase and continues through at least a portion of the inspiratory phase.

57. (Currently Amended) An intraoral electromuscular stimulation device adapted to provide intraoral electrical stimulation to a patient, the device comprising:

a first electrode;

a first support member adapted to support the first electrode in a sublingual location within a patient's oral cavity;

a second electrode;

a second support member adapted to support the second electrode in a sublingual location within such a patient's oral cavity, wherein the first support member and the second support member are configured and arranged such that the second electrode is disposed in a position posterior relative to the first electrode;

a sensor adapted to detect a respiratory parameter of such a patient and to output a signal indicative thereof; and

a control unit operatively coupled to the sensor, the first electrode and the second electrode, wherein the control unit (1) receives the signal from the sensor and distinguishes between inspiration and expiration of such a patient based thereon, (2) initiates an electrical stimulation of such a patient in an anterior-to-posterior of posterior-to-anterior direction via the first and the second electrodes at a stimulation start time between 100-200 ms prior to onset of inspiration, and (3) continues stimulation through at least a portion of inspiration.

58. (Previously Presented) The device of claim 57, wherein the first support member and the second support member are coupled to one another.

Claim 59. (Cancelled).

60. (Currently Amended) An intraoral electromuscular stimulation device adapted to provide intraoral electrical stimulation to a patient, the device comprising:

a first electrode;

a first support member adapted to support the first electrode in a sublingual location within a patient's oral cavity posterior to a frenulum and generally proximate to one of a first molar, a second molar, and a third molar of such a patient;

a second electrode;

a second support member adapted to support the second electrode in a sublingual location within such a patient's oral cavity and posterior relative to the first electrode, wherein the first support member and the second support member are configured and arranged such that the second electrode is disposed in a position posterior relative to the first electrode;

a sensor adapted to detect a respiratory parameter of such a patient and to output a signal indicative thereof; and

a control unit operatively coupled to the sensor, the first electrode and the second electrode, wherein the control unit (1) receives the signal from the sensor and distinguishing between inspiration and expiration of such a patient based thereon, (2) initiates an electrical stimulation of such a patient in an anterior-to-posterior of posterior-to-anterior direction via the first and second electrodes at a stimulation start time prior to onset of inspiration, and (3) continues stimulation through at least a portion of inspiration.